

DERWENT-ACC-NO: 1996-217856

DERWENT-WEEK: 199622

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TITLE: Horizontal mortar stake construction  
industrial method  
e.g. for digging tunnels - involves  
employing casing which rotates in opposite direction  
to that of auger while breaking and expelling dugged  
out earth and sand out of hole

PATENT-ASSIGNEE: KAJIMA CORP [KAJI]

PRIORITY-DATA: 1994JP-0213530 (September 7, 1994)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC
JP 08082186 A		March 26, 1996	N/A
004	E21D 009/04		

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-DESCRIPTOR	APPL-NO
JP 08082186A		N/A	
1994JP-0213530		September 7, 1994	

INT-CL (IPC): E02D003/12, E21D009/04

ABSTRACTED-PUB-NO: JP 08082186A

BASIC-ABSTRACT:

The method employs an auger (3) which is provided with a casing (2). A double tube (6) is provided in the axis of the auger, for injecting the quick hardening mortar material. The auger and the casing rotate in the opposite direction so as to advance in the digging direction. The

casing expels the  
major part of the dugged out earth and sand and the left  
out portion remains in  
the casing.

When the hole is dug upto the predetermined depth, the  
auger and the casing is  
withdrawn by rotating the auger and the casing in the same  
direction. The  
auger while retreating, rotates the mortar through the  
double tube inside the  
dug out hole. The casing rotates in the opposite direction  
to that of auger,  
while expelling dugged out earth and sand out of hole.

ADVANTAGE - Reduces construction cost. Provides good,  
accurate, horizontal  
mortar stakes. Provides handy operation. Prevents mortar  
leakage.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: HORIZONTAL MORTAR STAKE CONSTRUCTION  
INDUSTRIAL METHOD DIG TUNNEL  
EMPLOY CASING ROTATING OPPOSED DIRECTION AUGER  
BREAK EXPEL EARTH  
SAND HOLE

DERWENT-CLASS: Q42 Q49

SECONDARY-ACC-NO:  
Non-CPI Secondary Accession Numbers: N1996-182824

